

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF AN INTERSECTION CONTROL BEACON AT THE INTERSECTION OF MD 140 AND BETHEL ROAD IN CARROLL COUNTY. MD 140 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A FLASHING MODE WITH THE MD 140 SIGNAL INDICATIONS FLASHING YELLOW AND THE BETHEL ROAD SIGNAL INDICATIONS FLASHING RED.

CONTROLLER REQUIREMENTS

A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE NEMA CONTROLLER IN A BASE MOUNTED CABINET WITH MONITOR AND BATTERY BACKUP FOR PHONE DROP WILL BE INSTALLED.

SPECIAL NOTE

UPON COMPLETION OF THIS PROJECT THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF THE SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

PHASING CHART

	1	2	3	4	5	6	7	8	
	Y	Y	Y	Y	R	R	R	R	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	

EQUIPMENT LIST "B" CONTINUED

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR
ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO OOTS FOR APPROVAL PRIOR TO INSTALLATION.

ITEM NO.	QUANTITY	DESCRIPTION
8001	3 EA	FURNISH AND INSTALL 250 FT. VIDEO CABLE TO CONTROLLER
8003	1 EA	FURNISH AND INSTALL 500 FT. VIDEO CABLE TO CONTROLLER
8011	8 EA	FURNISH AND INSTALL 12 IN. VEHICULAR SIGNAL HEAD SECTION
8013	2 EA	FURNISH AND INSTALL 15 FT. STREET LIGHTING ARM FOR SIGNAL POLE
8014	2 EA	FURNISH AND INSTALL 250 WATT HPS LUMINAIRE
8020	1 EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT FOR SIGNAL
8022	1 EA	FURNISH AND INSTALL 50 FT. MAST ARM AND POLE
8035	1 EA	FURNISH AND INSTALL 50 FT./70 FT. TWIN MAST ARMS AND POLE
8051	1050 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
8052	250 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
8053	35 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
8057	10 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8058	65 LF	FURNISH AND INSTALL 4 IN. X 4 IN. WOOD SUPPORT
8060	260 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER WIRE
8064	100 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
8070	50 LF	FURNISH AND INSTALL ELECTRICAL CABLE 1-CONDUCTOR NO.4 AWG
8072	14 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8074	8 SF	INSTALL GROUND MOUNTED SIGN
8080	3 EA	FURNISH AND INSTALL GROUND ROD 3/4 IN. DIAMETER X 10 FT. LENGTH
8084	100 LF	FURNISH AND INSTALL ELECTRICAL CABLE 5-CONDUCTOR NO. 14 AWG
8085	820 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR NO. 14 AWG
8086	425 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR NO. 12 AWG
8091	15 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
8093	1 EA	FURNISH AND INSTALL CONTROLLER AND CABINET BASE MOUNT
---	2 EA	FURNISH AND INSTALL D3-1 SIGN "Bethel RD" (VAR. X 16")
---	2 EA	MAST ARM MOUNT
---	2 EA	FURNISH AND INSTALL M95-1 SIGN (24" X 78")
---	1 EA	MAST ARM MOUNT
---	1 EA	FURNISH AND INSTALL R3-5(L) SIGN (30" X 36")
---	1 EA	MAST ARM MOUNT
---	1 EA	FURNISH AND INSTALL R3-5(R) SIGN (30" X 36")
---	1 EA	MAST ARM MOUNT
---	1 EA	FURNISH AND INSTALL R3-8(MOD) SIGN (30" X 45")
---	1 EA	GROUND MOUNT
---	1 EA	FURNISH AND INSTALL R1-1 SIGN (36" X 36)
---	1 EA	GROUND MOUNT
---	1 EA	FURNISH AND INSTALL R1-2 SIGN (36" X 36)
---	1 EA	GROUND MOUNT
---	6 EA	FURNISH AND INSTALL WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING "SHARKS TOOTH"

EQUIPMENT LIST "A"

A. APPROVED SHA EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

CONTACT PERSONS FOR DISTRICT 7 ARE AS FOLLOWS:

MR. JOHN CONCANNON
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(301) 624-8141

MR. DAVE COYNE
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(301) 624-8106

MR. JIM BUCKALEW
ASSISTANT DISTRICT ENGINEER - UTILITIES
(301) 624-8110

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
(410) 787-7676

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787-7631

MS. DARLENE EIDE
SUPPLY OFFICER
SIGNAL SHOP WAREHOUSE
(410) 787-7668

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7652

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR
ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO OOTS FOR APPROVAL PRIOR TO INSTALLATION.

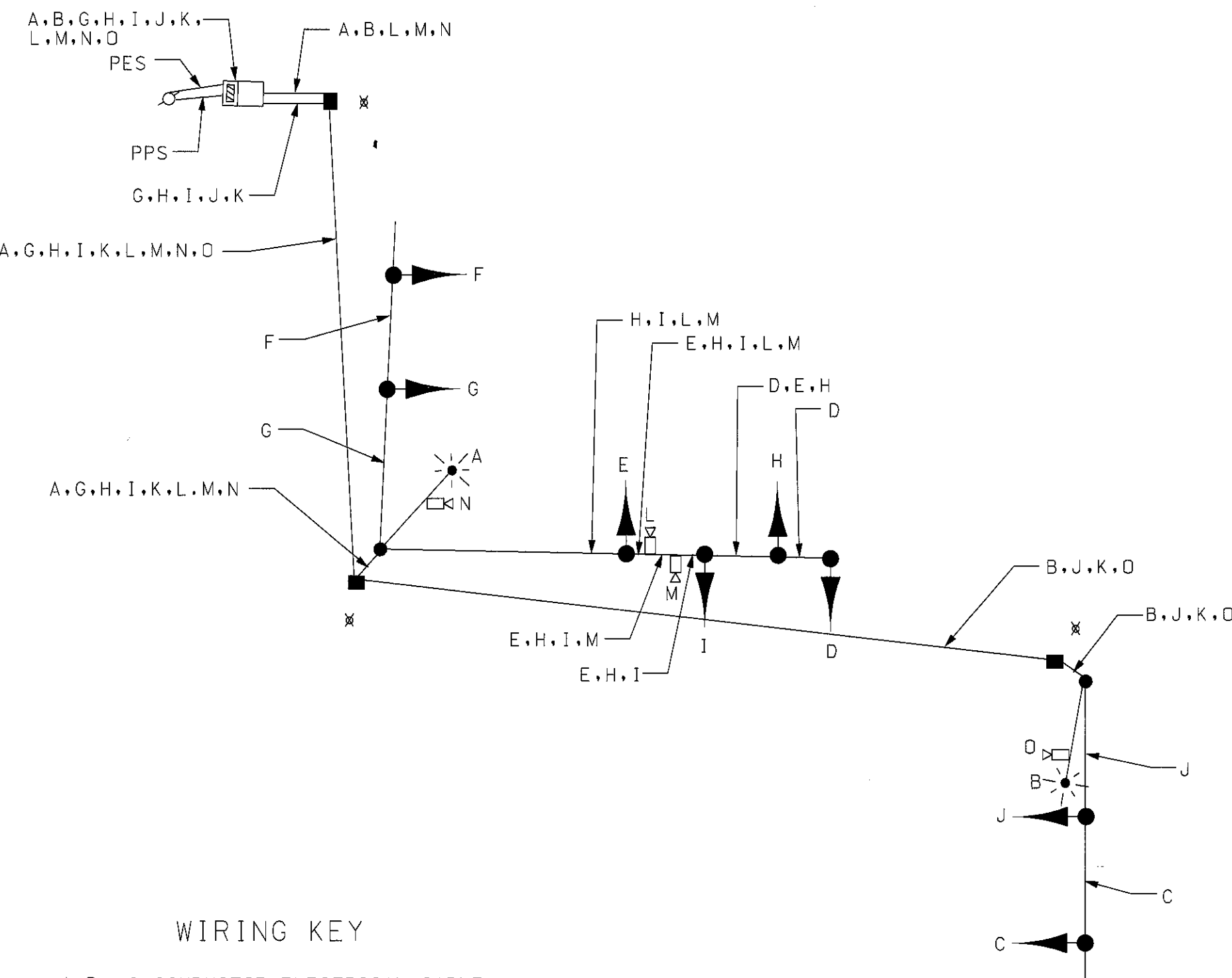
ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2002	3 CY	TEST PIT EXCAVATION
5001	4 EA	FURNISH AND INSTALL HEAT APPLIED PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROW
5005	25 LF	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED PREFORMED THERMOPLASTIC PAVEMENT MARKING

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

WIRING DIAGRAM



WIRING KEY

- A-B 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
- C-F 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- G-J 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- K STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- L-N VIDEO DETECTION 250 FT. PREMANUFACTURED CABLE FOR FUTURE CAMERAS
- D VIDEO DETECTION 500 FT. PREMANUFACTURED CABLE FOR FUTURE CAMERAS
- PES PROPOSED ELECTRICAL SERVICE
- PTS PROPOSED TELEPHONE SERVICE
- X GROUND ROD

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION
MD 140 AT BETHEL ROAD

DRAWN BY: M.HOWELL	F.A.P. NO. 4243	TS NO. 4243	SHEET NO. 2 OF 2
CHECKED BY: T.ZAYDEL	S.H.A. NO. BW996M82		
SCALE: 1" = 20'	COUNTY: CARROLL	T.I.M.S. NO. F754	
DATE: 12-2-03	LOG MILE: 06014005.04		